

## **Blazed array sonar systems - a new technology for creating low-cost, high-resolution imaging sonar systems for fisheries management.**

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Keywords: Sonar, fisheries management, sixgill shark, salmon

Dr. Lee Thompson at the Applied Physics Lab at the University of Washington (APL-UW) has been developing a low-cost, miniaturized imaging sonar technology for mine imaging applications in DOD-funded projects. This technology enables high-performance imaging sonar systems that require less than 14 cuin of electronics, less than 10 W of power, and will eventually cost less than \$10K in production. One of these prototype systems was recently installed in Puget Sound behind the Seattle Aquarium under Washington Sea Grant funding to allow the scientists there to image and track Sixgill sharks out to a range of 180 ft during shark tagging activities. This system allowed the scientists at the aquarium to more effectively anticipate and plan for tagging and provided more insight into the shark's individual and group feeding behaviors. In addition, one of these sonar systems was recently used to collect streaming sonar imagery of the 2004 salmon migration in Lake Union. These sonar movies show dozens of individual fish swimming and interacting with each other at ranges up to 100 ft. This technology provides new opportunities in fisheries management to implement long-term, non-invasive acoustic monitoring and observation systems. This UW technology has recently been licensed to BlueView Technologies, Inc. This presentation will show recent imaging results and describe the new BlueView products that will be available this summer.